

1      Claim 1.    A method for implementing a segmentation addressing  
2      operation comprising the steps of:  
  
3      providing a first logical address and a segment,  
  
4      deriving a linear address from the logical address and the segment in a  
5      first discrete sub-step in which the properties of a logical address are  
6      checked to determine whether those properties are consistent with the  
7      criteria for addressing the segment, and  
  
8      performing a base add operation to determine the linear address in a  
9      second discrete sub-step.

1      Claim 2.    A method for implementing a segmentation operation  
2      comprising the steps of:  
  
3      providing a first segment selector for deriving a linear address of a  
4      segment descriptor in a first descriptor table,  
  
5      providing a second segment selector for deriving a linear address of a  
6      segment descriptor in a second descriptor table,  
  
7      attempting an access of the first descriptor table to derive a segment  
8      descriptor,  
9      attempting an access of the second descriptor table to derive a segment  
10     descriptor if the access of the first descriptor table fails, and  
  
11     storing a derived segment descriptor from a successful attempted access  
12     in a descriptor register.

1      Claim 3.    A method as claimed in Claim 2 in which any attempt to  
2      access is divided into discrete sub-steps comprising:  
3            checking properties of a logical address to determine whether those  
4            properties are consistent with the criteria for addressing a first descriptor  
5            table in a first discrete sub-step of deriving a linear address, and  
6            performing a base add operation to determine the linear address as a  
7            second discrete sub-step of deriving a linear address.

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